

# Notice of Allowability

Application No.

10/623,201

Examiner

Justin Krause

Applicant(s)

NEUMANN, RUDOLF

Art Unit

3682

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendments filed June 9, 2006.
2. ☒ The allowed claim(s) is/are 1-3,5-9,11 and 12.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

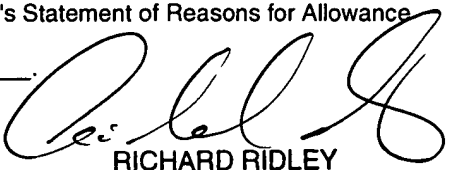
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
RICHARD RIDLEY  
SUPERVISORY PATENT EXAMINER

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Anna Vishev on June 20, 2006.

The application has been amended as follows:

#### **IN THE CLAIMS**

The following changes have been made to correct indefiniteness under 35 USC 112, 2<sup>nd</sup>

#### **Paragraph:**

Claim 1 has been replaced in its entirety with:

--A hydrodynamic bearing system comprising:

    a shaft having an outer surface;

    a bearing sleeve, said bearing sleeve having an inner cylindrical bore, said shaft being inserted into said inner cylindrical bore;

    a bearing gap formed between said outer surface of said shaft and said bearing sleeve, said bearing gap being filled with a lubricating oil;

    said bearing sleeve further comprising:

        an outer cylindrical surface;

        an inner cylindrical surface; and

an end surface, said end surface having a recessed portion  
said recessed portion being defined by a radially outward facing axial surface and  
a radially inward facing axial surface; and  
said recessed portion is positioned between said inner cylindrical surface and  
said outer cylindrical surface and distanced from said bearing gap,  
wherein an area of said end surface between said radially outward facing  
surface of said recessed portion and said inner cylindrical surface of said  
bearing sleeve defines a wall between said recessed portion and said  
bearing gap;  
a shield enclosing said bearing sleeve, wherein said shield is mounted in said  
recessed portion; and  
wherein, said shield, an outer surface of said shaft and said end surface define  
an inner shielded space, said recessed portion is located within said inner shielded  
space.—

Claim 7 has been replaced in its entirety with:

--A spindle motor having a hydrodynamic bearing system, said hydrodynamic bearing  
system comprising:

a shaft having an outer surface;  
a bearing sleeve, said bearing sleeve having an inner cylindrical bore, said shaft  
being inserted into said inner cylindrical bore;

a bearing gap formed between said outer surface of said shaft and said bearing sleeve, said bearing gap being filled with a lubricating oil;

said bearing sleeve further comprising:

an outer cylindrical surface;

an inner cylindrical surface; and

an end surface, said end surface having a recessed portion

said recessed portion being defined by a radially outward facing axial surface and a radially inward facing axial surface; and

said recessed portion is positioned between said inner cylindrical surface and said outer cylindrical surface and distanced from said bearing gap,

wherein an area of said end surface between said radially outward facing surface of said recessed portion and said inner cylindrical surface of said bearing sleeve defines a wall between said recessed portion and said bearing gap;

a shield enclosing said bearing sleeve, wherein said shield is mounted in said recessed portion; and

wherein, said shield, an outer surface of said shaft and said end surface.—

The following changes have been made to establish a structural relationship:

In claim 5, the phrase -- located on said outer cylindrical surface of said bearing sleeve.-- has been inserted after the word "groove".

In claim 11, the phrase -- located on said outer cylindrical surface of said bearing sleeve.-- has been inserted after the word "groove".

2. The following is an examiner's statement of reasons for allowance:

The prior art, taken as a whole, does not teach or render obvious the claimed combination wherein comprising a hydrodynamic bearing system or a spindle motor having a hydrodynamic bearing system with a shield, the shield, an outer surface of the shaft and the end surface of the bearing sleeve define an inner shielded space with a recessed portion located with the inner shielded space.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin Krause whose telephone number is 571-272-3012. The examiner can normally be reached on Monday - Friday, 7:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JML  
6/20/06